# **Curriculum Vitae**

Halyna M. Hubal <u>Name</u>

**Place of Birth** Lviv - Ukraine

**Position** PhD., Associate Professor

> of Department of Physics and Higher Mathematics h.hubal@Intu.edu.ua\_



### **DEGREES RECEIVED:**

<u>Degree</u> **Institution** <u>Department</u> Department of Differential Equations

Lesya Ukrainka Volyn State University MSc

(Ukraine),

Faculty of Mathematics

PhD Institute of Mathematics of National

> Academy of Sciences of Ukraine with Partial Derivatives,

(Kyiv)

Department of Differential Equations

and Mathematical Physics

University (Ukraine)

Department of Mathematical Physics

# **WORK EXPERIENCE:**

<u>Rank/Position</u> Associate Professor,	<u>Department</u>	Institution/Company name
Deputy Head of Department of Physics and Higher Mathematics for Research	Physics and Higher Mathematics	Lutsk National Technical University (Ukraine)
Associate Professor	Basic Sciences	Lutsk National Technical University (Ukraine)
Associate Professor	Higher Mathematics	Lutsk National Technical University (Ukraine)
Associate Professor	Theoretical and Fundamental Economics	Volyn Institute for Economics and Management (Ukraine)
Senior Lecturer	Theoretical and Fundamental Economics	Volyn Institute for Economics and Management (Ukraine)
Senior Lecturer	Higher Mathematics and Informatics	Lesya Ukrainka Volyn National

# **INTERNSHIPS:**

17.05.2024	Sydney, Australia, certificate, publication
12.04.2024	Vienna, Austria, certificate, publication
02.04.2024-05.04.2024	Athens, Greece, certificate, publication
19.01.2024	Vienna, Austria, certificate, publication
14.11.2023-17.11.2023	Zagreb, Croatia, certificate, publication
10.11.2023	Vienna, Austria, certificate, publication
14.02.2023-17.02.2023	Osaka, Japan, certificate, publication
07.02.2023-10.02.2023	Stockholm, Sweden, certificate, publication
06.09.2022-09.09.2022	Paris, France, certificate, publication
08.02.2022-11.02.2022	Ankara, Turkey, certificate, publication
01.02.2022-04.02.2022	Tokyo, Japan, certificate, publication
25.01.2022–28.01.2022	London, England, certificate, publication
02.03.2021-05.03.2021	Tokyo, Japan, certificate, publication
16.02.2021-19.02.2021	Rome, Italy, certificate, publication
02.02.2021-05.02.2021	Lisbon, Portugal, certificate, publication
12.10.2020-16.10.2020	Stockholm, Sweden, certificate, publication
05.10.2020–08.10.2020	Tokyo, Japan, certificate, publication

# NUMBER OF WORKS PUBLISHED IN SCIENTIFIC JOURNALS AND CONFERENCE PROCEEDINGS:

Author of 182 publications (166 of them are individual) including 129 - publications in scientific journals and in conference proceedings (113 of them are individual), 2 individual monographs, 14 books (13 of them are individual).

Main scientific publications (most of them are individual) are published in leading mathematical scientific foreign editions, a significant number of which are included in various international scientometric databases (in particular, in Scopus, Web of Science, etc.).

#### **TOPICS OF NEW RESEARCH PROJECTS:**

Mathematical study of infinite dynamic systems corresponding to the equations of mathematical physics. Mathematical modeling of real processes during the research of gases, liquids, plasma, solid bodies and biological organisms of various degrees of development and composition, where functional-analytical and probabilistic mathematical methods are used, and the BBGKY hierarchy of equations (Bogoliubov's chain of equations) is of particular importance. The use of the research in the fundamental areas of modern mathematics, in various branches of physics, mathematical biology, mathematical economics, and modern nanotechnologies. Mathematical modeling of biochemical processes on such issues as oscillations and synchronization of these oscillations, mutual synchronization in the life of individual cells and groups of cells, intercellular metabolism due to diffusion, self-oscillations in glycolysis, biochemical processes rates in cells, mathematical analysis of qualitative characteristics of solutions of systems of differential equations describing biochemical processes rates, mathematical study of the stability of fixed points of systems of differential equations describing biochemical processes rates, mathematical modeling of the self-oscillating biochemical process of photosynthesis.

Programming in different programming languages.

Investigations and work in the LATEX system.

# **TEACHING COURSES:**

Higher Mathematics,
Applied Mathematics,
Probability Theory, Random Processes, Mathematical Statistics,
Mathematics for Economists,
Mathematical Analysis,
Computer Discrete Mathematics,
Discrete Mathematics,
Mathematical Programming,

Operations Research,
Programming,
Basics of Working on a Personal Computer,
Mathematical Foundations of Classical Statistical Mechanics
Higher Mathematics (for foreign students in English)
Probability Theory and Mathematical Statistics (for foreign students in English)

# **PROFESSIONAL ACTIVITIES:**

Editorial Team Member of International Science Journal of Engineering & Agriculture that is peer-reviewed journal placed in many scientometric databases (eISSN 2720-6319).

Editorial Board Member of International Science Group peer-reviewed Edition that is placed in many scientometric databases.

Member of the non-governmental organization "International Educators and Scientists Foundation" (in specialties: 111 Mathematics and 113 Applied Mathematics).

# PERSONAL SKILLS AND COMPETENCES:

# Languages:

Ukrainian native language English Level B2; certificate No. CEB1-215 dated March 2020, First Certificate in English (FCE) -B2 First, Council of Europe Level B2